



Department of Commerce
EnergySafety



Joint position statement between the Fire and Emergency Services Authority (FESA), EnergySafety, Western Power and the National Electrical & Communications Association (NECA), on the safe use of 240 volt and extra low voltage (less than 50 Volts) dichroic (halogen) down lights to reduce the risk of fire.

A review of FESA fire data for the period 2002 to 2009 reveals a substantial increase in roof space fires which have occurred when heat from a down light (in particular low voltage dichroic down lights) has come into contact with insulation or other combustible material.

These fires have resulted in damage ranging from smouldering cellulose and bagged insulation, charred roof timbers, burnt transformers through to severe fire damage to the entire home.

FESA and EnergySafety have identified that the main causes are as follows:

- Poor or illegal installation,
- Illegal DIY installation,
- Poor installation of ceiling insulation;
 - blow-in or bagged cellulose insulation installed too close to the light,
 - blow-in or bagged cellulose insulation totally covering low voltage lights,
 - convection currents in roof space moving blow in or cellulose insulation to contact exposed hot light assemblies,
- Build up of leaf litter in the roof space contacting the back of the light,
- Build up of dust (and other combustibles) on the light,
- Contractors in roof space moving or accidentally displacing blow-in or bagged cellulose insulation too close to an exposed light assembly,
- Air conditioning ducting being placed directly over lights.

With the increase in down light fires, FESA, EnergySafety, Western Power and NECA are committed to reducing the number of fires and these guidelines have been developed on a joint basis to raise community awareness and alert the electrical and roof insulation industries of the

hazards, pitfalls and possible dangers associated with the installation and maintenance of down lights.

Joint position

FESA, EnergySafety, Western Power and NECA agree that:

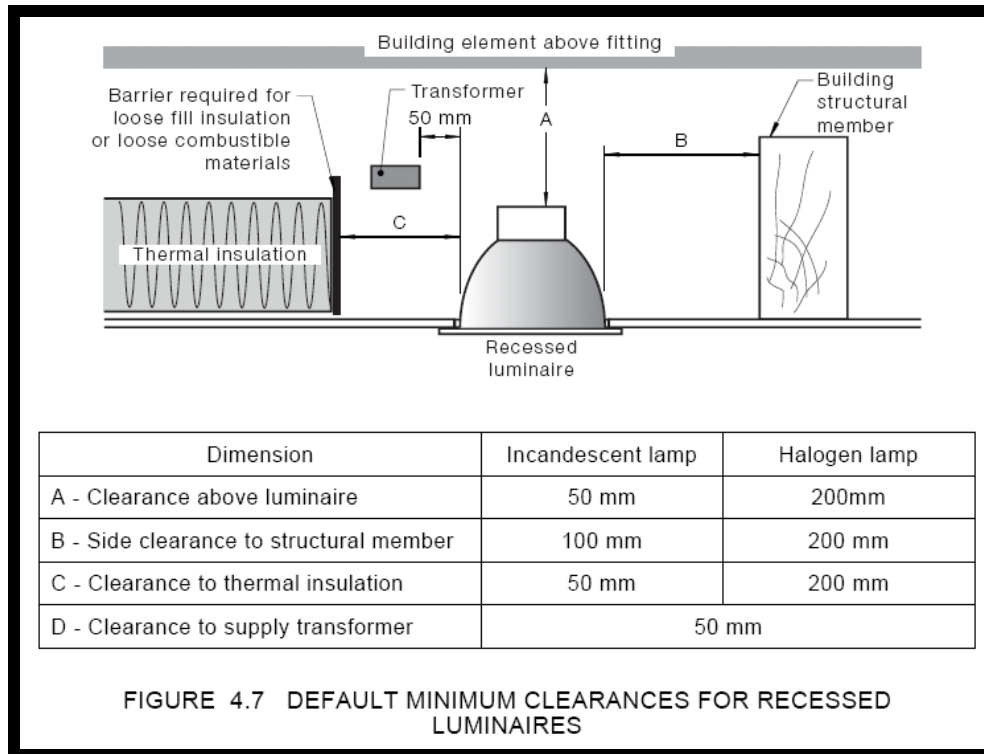
- Down lights, when correctly installed, **DO NOT** pose a fire risk as compliance with the Australian Standards - Wiring Rules 2007 specify:
 - a minimum side and top distances between down lights and roof timbers,
 - ability for heat-producing devices to disperse heat,
 - physical barriers to prevent combustible materials being too close to exposed light assemblies.
- Insulation, whether it is blow-in, bagged cellulose or batts **DOES NOT** pose a problem when installed correctly around down lights.
- Down lights installed close to a roof timber, or covered over by insulation products or other combustible material **DO** pose a fire risk,

FESA, EnergySafety, Western Power and NECA recommendations to the community

- Always use a Licensed Electrician and ask to see their Electrician's Licence,
- Ask your Licensed Electrician to show you the commercially available barriers to keep insulation and combustibles away from the back of down lights,
- Request a Licensed Electrician to inspect all down lights and transformers and ensure a non-flammable / mechanical barrier is installed to prevent insulation or other combustible material covering them,
- Always use fittings and guards that meet Australian Standards,
- Never allow the installation of electrical equipment that produces heat into or against insulation products or roof timbers,
- Following **ANY** works in the roof space, request your Licensed Electrician or insulation installer to inspect all down lights and transformers to ensure they are clear of insulation or other material so that any heat produced from a down light or other heat source is allowed to dissipate,

- Consider replacing 240 volt incandescent globes with compact fluorescent globes, as these produce less heat.
- Consider replacing 12 volt dichroic halogen globes with Light Emitting Diodes (LED), as these too produce considerably less heat.

Current Standard



Wiring Rules (AS/NZS 3000) - 2007

Electrical safety advice

If in doubt, contact your local Licensed Electrical Contractor or EnergySafety on 9422 5200 or www.energysafety.wa.gov.au

Fire safety advice

For additional fire safety advice contact the Fire and Emergency Services Authority on 93239300 or www.fesa.wa.gov.au.

Signatures


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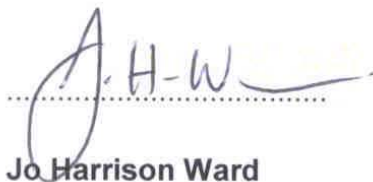

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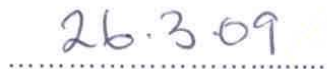
Ken Bowron

Date

Director Energy Safety

Department of Commerce


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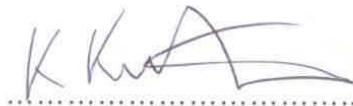

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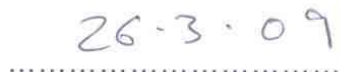
Jo Harrison Ward

Date

Chief Executive Officer

Fire and Emergency Services Authority


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Kyle Kutasi

Date

General Manager

National Electrical & Communications Association – Western Australia


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Anthony Mancini

Date

Technical Administrator / Principal Electrical Inspector

Western Power Corporation